

AMENDMENTS TO THE CLAIMS:

Please cancel without prejudice claims 1 and 9 and amend claims 2, 10 and 15 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (cancelled).
2. (currently amended) A fibre-optic surveillance system including:
a fibre-optic sensor array ~~according to claim 1~~ comprising:
at least two fibre-optic point sensors; and
a distributed fibre-optic sensor linking said at least two fibre-optic point sensors, wherein said sensor array provides an array output of sensed data from said at least two fibre-optic point sensors and said distributed fibre-optic sensor; and further including
an interferometric interrogation system, ~~said interrogation system~~, responsive to said sensed data output from said array indicative of a force applied to at least one of said sensors, for establishing a position at which said force is applied.
3. (original) A fibre-optic surveillance system according to claim 2 wherein the fibre-optic sensor array is connected to the interrogation system by a fibre-optic cable.
4. (original) A fibre-optic surveillance system according to claim 2 wherein the fibre-optic sensor array is connected to the interrogation system by a transducer and a wire cable.

5. (previously presented) A fibre-optic surveillance system according to claim 2 wherein each of the fibre-optic point sensors comprises optical fibre wound into a flexural disc.

6. (previously presented) A fibre-optic surveillance system according to claim 2 wherein the fibre-optic point sensors are geophones.

7. (previously presented) A fibre-optic surveillance system according to claim 2 wherein each fibre-optic point sensor comprises a fibre-optic accelerometer.

8. (previously presented) A fibre-optic surveillance system according to claim 2 wherein the distributed fibre-optic sensor comprises optical fibre packages within a cable to measure one of pressure on the cable and bend of the cable.

9. (cancelled).

10. (currently amended) The system of claim 9 wherein the interferometric interrogation system comprises a reflectometric interferometric interrogation system.

11. (original) The system of claim 10 wherein the reflectometric interferometric interrogation system comprises a pulsed reflectometric interferometric interrogation system.

12. (original) The system of claim 11 wherein the pulsed reflectometric interferometric interrogation system employs time-division multiplexing to distinguish individual sensors.

13. (original) The system of claim 2 wherein the interrogation system comprises a Rayleigh-backscatter interrogation system.

14. (original) The system of claim 13 wherein the Rayleigh-backscatter interrogation system comprises a pulsed Rayleigh-backscatter interrogation system.

15. (currently amended) A method of establishing the position at which an object moving on a surface crosses a path of fixed length, wherein said method comprises the steps of:

(i) positioning at the fibre-optic sensor array of a surveillance system ~~according to claim 1~~ adjacent said path, said surveillance system including:

a fibre-optic sensor array comprising:

at least two fibre-optic point sensors; and

a distributed fibre-optic sensor linking said at least two fibre-optic point sensors, wherein said sensor array provides an array output of sensed data from said at least two fibre-optic point sensors and said distributed fibre-optic sensor; and

an interferometric interrogation system, responsive to said sensed data output from said array indicative of a force applied to at least one of said sensors, for establishing a position at which said force is applied; and

(ii) analysing optical signals received from the sensor array using the interferometric interrogation system of said surveillance system to establish the position of the object crossing the path.

16. (previously presented) A method according to claim 15, wherein the optical signals are analysed by measuring the delay between signals received from adjacent said at least two fibre-optic point sensors along the array and combining these signals with a signal from the distributed fibre-optic array linking said at least two fibre-optic point sensors to locate and confirm said position.